

DOCUMENT RESUME

ED 265 541

CS 209 502

AUTHOR Whale, Kathleen B.
TITLE Assigned Writing Tasks in School: A Search for Meaning.
PUB DATE 29 Mar 85
NOTE 20p.; Paper presented at the Annual Meeting of the National Council of Teachers of English Spring Conference (4th, Houston, TX, March 28-30, 1985).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Elementary Education; Language Processing; *Student Reaction; *Writing Exercises; Writing Improvement; *Writing Instruction; Writing Processes; *Writing Research; Writing Skills
IDENTIFIERS *Writing Topics

ABSTRACT

Extending an earlier Donald Graves study by including students over seven years of age, this study identified relationships among the nature of writing tasks assigned by teachers and the written responses of elementary school students to those tasks. One class each at the third, fifth, and seventh grade levels provided eighteen sets of writing tasks and responses representing over 400 pieces of writing. Students' writings were analyzed for topic, territory, person, and mode of discourse. Results indicated that relationships do exist among the nature of writing tasks assigned by teachers and the written responses of students. For example, topics were always assigned as part of the writing task and students' writings reflected the assigned topics. Although territory, person, and mode were seldom specified in the assigned writing tests, when teachers did clearly state specifications for territory, person, or mode, students' writing reflected them. In addition to raising questions about aspects of the writing process, this study provides information that teachers can use to provide a wide range of writing activities for students. (DF)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

ASSIGNED WRITING TASKS IN SCHOOL: A SEARCH FOR MEANING

by Kathleen B. Whale

Paper Presented at National Council of Teachers of English
Spring Conference
Houston, Texas

March 29, 1985

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY

Kathleen B. Whale

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

ED265541

CS209 502

ASSIGNED WRITING TASKS IN SCHOOL: A SEARCH FOR MEANING

by Kathleen B. Whale

Writing across the grade levels in elementary and high schools is usually a directed activity in which teachers assume responsibility for stimulating students to write. Teachers decide the nature of the writing task, the time of day, and the length of time to complete the writing. Such control suggests that teachers need to be knowledgeable about the kinds of writing tasks they set. Two factors must be considered here. If teachers focus on a restricted number of topics and modes of writing, the students may have a limited understanding of what writing is, what it is for and how they can use it for their own purposes. If school writing represents the only writing students do this understanding of the functions of writing is limited even further.

Given these conditions, students could develop language and writing abilities necessary to communicate as required under guidance but could find it difficult to write for their own purposes. For example, creating a poem requires different kinds of writing abilities than writing an argument. Writing a report demands a different use of information than writing to express emotions. Writing demands, too, a way of thinking that differs markedly from conventions in speech. When teachers assume the responsibility to direct and control writing tasks, they commit themselves to provide the kind and amount of practice students need to learn to writing using a range of modes for a variety of purposes.

The points I want to make in this paper are based on a study that was designed to identify and relationships among the nature of writing tasks assigned by teachers and the written responses of elementary school students to

those tasks. If relationships do exist, what could that knowledge contribute to educators' understanding of the teaching of writing in schools?

THE STUDY

The study was designed to extend Grave's study (1973) by including students older than seven years, and to discover any similarities between the findings of this study and those of Britton et al. (1975), Whale and Robinson (1978), and Whale (1980) related to the concept of modes of discourse.

Accordingly, for a period of six weeks, written descriptions of the teachers' assigned writing tasks and the written responses of the students were collected. All writings were completed in regularly scheduled language arts periods. One class each at the Year three, five, seven grade levels provided eighteen sets of writing tasks and responses representing over 400 individual pieces of writing.

Data were analyzed in three stages. Each writing assignment, consisting of students' writings and a teacher's description of the task, was analyzed to identify:

- (1) the nature of the teacher's writing task,
- (2) aspects of each student's writing, and
- (3) relationships between the writing task set by the teacher and aspects of students' writings.

The writing tasks set by each teacher were analyzed on the basis of a written description provided by the teachers. Students' writings were analyzed for: topic, territory, person, and mode of discourse. Topic and person were identified by the researcher. Territory was identified by applying to the student's writing, the interpretation of primary, secondary and extended territory used by Graves (1973). Mode of discourse was identified by applying Britton's (1975) function categories of transactional, expressive, poetic to

each student's writing.

FINDINGS OF THE STUDY

Findings indicated that relationships do exist among the nature of writings tasks teachers assign and aspects of students' written responses. The following description of the kinds of writing tasks the teachers provided and specific features of the students' writings establishes a framework for identifying the relationships and discussing the implications such relationships have for professional educators.

Nature of Assigned Writing Tasks

All tasks assigned to students during the six weeks of the study originated with the teachers.

Year Three. Of nine writing tasks assigned to Year Three students, the majority involved the use of students' imagination, often with animals as main characters. Three assigned writings that did not require an imaginary aspect related directly to students' actual experiences during a field trip to a farm. For these nine writing tasks the teacher asked students for an account of an event, a description of a event, a poem about an event, and to "write a story" which included imaginary events or exaggeration. None of the writing tasks involved students in expressing their feelings, giving opinions, or in building an argument.

Materials and resources used for the assigned writing tasks included: the reading series the students were using, trade books, a film strip from the school's resource centre, and a National Film Board (NFB) film available from the local NFB office.

In preparing students to write, the teacher used literature selections and class discussions of ideas and instructions for writing. The field trip was the one example of a student activity that provided the basis for a writing

task.

Year Five. The five separate writing tasks assigned to this group of students varied as to an imaginary or realistic focus. Four tasks required students to "write a story." Of these four tasks two required an imaginary response; one could be either imaginary or realistic; one had to be realistically possible. The fifth writing task asked for a "colourful yet plausible description."

Language Arts text books used in the school and commercially available books of writing assignments provided the teacher with resources and materials for designing writing tasks.

The teacher used a pattern of writing instruction for all tasks assigned: prewriting activities (reading of literature selections and teacher-student discussions related to the reading and to the writing assigned), a first draft of the writing, peer proofreading with suggestions for improvement, rewriting, and a final copy handed in to the teacher. This cycle of activities was spread over two to five consecutive sixty minute language arts periods. Writings were completed out of class if students found class time insufficient.

Year Seven. Year Seven students completed four separate writing tasks. Two of these tasks required students to "write a story": an adventure in which the student was to take the first person point of view of a character in a picture, and a story in which the central character displayed courage. One task asked students to respond to a question that required a reasoned response: What discovery or invention if made today or tomorrow would change the way we look at things? or Pros and Cons of Continuing Nuclear Experimentation (or of Genetic Experiments or other work in science or technology). The final task gave students the opportunity to write a ballad with a current realistic theme.

For all of these writing tasks, the teacher used the resources of the

local Board of Education Language Arts Curriculum, English 7, 8, 9, for the Year Seven grade level. Students wrote these assignments during their sixty-minute language arts class; they were responsible for completing writings out of class if they found class time insufficient.

Aspects of Assigned Writing Tasks

Four specific aspects of writing were identified through analysis of the assigned writing tasks of this study: topic, territory, person, mode.

Topic. A distinction between topic and task was necessary because of the ways in which teachers assigned writing. They assigned tasks, not topics. Topic, materials and prewriting activities were presented together; therefore, task refers to all of these aspects of writing. Topic refers only to the subject of the writing.

Teachers assigned five categories of tasks:

- (1) narration: adventure (all grades)
- (2) narration: imagination and realism (Year Three - imagination;
Year Five - imagination/realism; Year Seven - realism)
- (3) poetry (Year Three and Year Seven)
- (4) description (Year Three and Year Five)
- (5) exposition (Year Seven)

Territory. In analyzing the writings for territory, a distinction was necessary between territory and setting. Both can be a location. But, setting is always a place, sometimes part of the prewriting motivation for writing, sometimes a location for the writing. However, territory can be an event, theme, or experience as well as a location in the writing.

Graves' (1973) Territory Wheel, developed through analysis of writings of seven year old children, describes primary, secondary, and extended territory. These categories were used as an analytical process with the data. For

example, writing categorized as being in primary territory includes the writer's immediate environment of home and school as setting; secondary territory includes the area beyond the writer's home and school as setting; extended territory includes settings beyond primary and secondary territory - current events, history, geography, and imaginary settings. For this study, in analyzing tasks for their potential to encourage writings in one of the territories, task requirements as stated in teachers' written descriptions of the writing tasks, resources/materials used, and prewriting activities were considered. Split categories, such as P/S (primary and secondary) were used where the task included materials or task instructions related to two or more categories.

The eighteen writing assignments analyzed for all three grade levels encouraged writing in extended territory. In responding to these assignments students were asked to project themselves out of their immediate surroundings and personal thoughts into unfamiliar places with less personal topics.

Person. Writing assignments were analyzed for requirements to write in first, second, or third person. Five of the eighteen assignments specified first or third person. For twelve assignments, person was not specified; for one assignment person was unrecorded. The Year Seven teacher explained point of view and actually stated it as a requirement for the adventure story. In the Year Three and Year Five assignments, the nature of the writing tasks and the instructions given indicated that first or third person was the only acceptable point of view for the writing, but the teacher did not "teach" point of view.

Mode. The function categories (Transactional, Expressive, Poetic), developed from the research of Britton et al. (1975), provided a framework for the systematic analysis of the assigned writing tasks. Mode was directly

specified in three of the writing tasks assigned across the grade levels: two Year Three tasks, one in poetic and one in transactional mode; one task in poetic mode for Year Seven. These writing tasks specified mode through the structure or narrow scope of the assignment; for example, the cinquain (Year Three) and ballad (Year Seven) tasks required poetic structures characteristic of these forms of poetry. Thus, the nature of the task specified poetic mode. The Year Three writing assignment that required a direct account of the events of a class hike, in the order in which they occurred, specified a report which is writing in the transactional mode.

For the remaining (15) assigned writing tasks teachers' instructions or the prewriting activities implied the use of more than one mode. Again, split categories such as Transactional/Expressive (T/E) and other combinations of the three modes were used to accommodate all aspects of the writing instructions and prewriting activities. For example, students in Year Five were asked "to write a story about an island... which must be possible." These instructions directed them to a poetic mode of response. As part of the prewriting activities, students completed an island questionnaire which prompted a transactional mode of response. Excerpts from a book and a poem were written in poetic mode with an emphasis on mood and personal experience associated with being on an island. For this writing, then, although the task instructions indicated the poetic mode of response the prewriting activities broadened the choice of mode. Students could respond in Transactional, Expressive, or Poetic mode and still be within the scope of the task.

Topic was always specified by teachers as part of the writing assignments.

Territory and Mode were usually suggested through materials, prewriting activities, or task instructions but seldom specified. Person was mentioned infrequently; it was an unspecified aspect of the majority of the tasks. One

Year Three task specified all four aspects; it was the exception in the assigned writing tasks. For most of their assigned writing tasks the teachers in this study provided broad suggestions which allowed students choice of territory, person, and mode.

Aspects of Students' Writings

The students' writings of the study were analyzed for three aspects of writing: territory, person, mode. All topics were selected and presented by the teachers as an integral part of the assigned writing tasks. No students generated their own topics; therefore, analysis for topic in students' writings was not appropriate.

Students' writings indicated the following preferences for territory and mode over the six week time period of the study.

Territory. Of the total number of written responses (391) that were analyzed, more than 70% were written in extended territory and transactional mode across grade levels. Year Five students showed the strongest preference for extended territory, transactional mode; Year Three students demonstrated the weakest tendency to write in the transactional mode.

Person. Across grade levels students' written responses showed close to an equal split between first and third person. Year Three responses indicated a preference for third person; Year Five responses were written predominantly in first person. Year Seven writings showed the greatest variance in distribution of the use of first person, and third person, although writings in first person did predominate.

Mode. The students' writings across grade levels were mainly in the transactional mode. However, written responses of Year Three and Year Five students indicated an interest in using the poetic mode. Year Seven writings showed a class preference for transactional mode followed by the categories of

additional, poetic, and expressive modes. The high number of Year Seven responses categorized as "additional" reflected inconsistencies in the prewriting materials of the ballad task.

The ballad demands a specific poetic form; therefore, the assignment to write a ballad requires the use of poetic mode. But, one of the two poems students read prior to writing was not a ballad; it was written in free verse. In addition to this anomaly, the teacher's instructions about the form of a ballad were minimal. These features of instruction may have confused students as to what constitutes ballad form.

Relationships Among Teachers' Assigned Writing Tasks and Students' Written Responses

Results of these analyses of data were compared to identify relationships among assigned writing tasks and written responses. For each task and each writing, specific questions guided the analytical process.

What were the specifications of the task?

Did the writing include these specifications?

If the task was unspecific in territory, person or mode, what were the suggestions for these aspects of writing?

Did the writing include the suggestions?

In the eighteen writing tasks of the study, topic was always specified. Territory was specified in five of the tasks, person in five, and mode in three. Territory was suggested in twelve tasks; person was either specified or unspecified; mode was suggested in fifteen tasks. The majority of students' written responses did reflect the directions indicated in the writing tasks. Teachers provided enough opportunity in writing tasks to accommodate student choice in most aspects most of the time.

In the instances in which students' writings did not reflect the

guidelines teachers provided, three characteristics of the tasks were noted. The number of the requirements in one assignment affected the written responses: the greater the number of requirements the greater the number of writings that did not reflect all of the requirements. The degree of structure demanded in an assignment influenced the students' writings: the greater the degree of structure the greater the number of writings that failed to include the requirements of the task. This characteristic was particularly noticeable in the poetry assignments. Then, there were certain students whose writing never did fulfill the demands of the assignments.

Two characteristics of the assigned tasks appeared to influence the students to follow the teachers' directions: when the task directed students' attention to a situation or character, but not both, within one assignment; and, when the task resulted from a direct, firsthand experience of the writer prior to the writing assignment.

Relationships Among Aspects of Teachers'

Assigned Writing Tasks and Aspects of

Students' Written Responses Across Grade Levels

Topics were always assigned as part of the writing task and students' writings reflected the assigned topics.

Territory was specified in less than 30% of the total number of tasks which gave students ample choice for their writings. Students preferred extended territory, using it in more than 70% of their writings.

Person was specified in less than 30% of the total number of tasks: first person was specified in 20%, third person in 6%, of the writing tasks. Students' writings reflected a preference for first and third person: 53% of

the responses were written in first person, 47% in third person.

Mode was specified in less than 20% of the total number of tasks: poetic mode in 11% of the tasks, transactional mode in 6%. Students showed a strong preference for the transactional mode; more than 70% of their writings were classified in this mode.

In summary, territory, person, and mode were seldom specified in the assigned writing tests. Where teachers directed students to use these aspects of mode, they specified extended then secondary territory, first then third person, and poetic then transactional mode. In their written responses students showed strong preferences for extended territory and transactional mode, with an almost equal distribution of the use of first person and third person. When teachers clearly stated specifications for territory, person, or mode, either in the writing tasks or in the prewriting activities, students' writings reflected those specifications.

DISCUSSION

The Nature of Teachers' Writing Tasks

In assigning writing tasks to students, the teachers in this study took responsibility for choosing the topic, guiding the prewriting activities and providing instructions on which students were to base their writing. Students did not engage in personal, free writing. Educators claim that specificity and consistency in instruction are important. In designing writing tasks, then, teachers need to be specific and consistent in their choice of topic, prewriting activities and materials, and instructions to make sure that students practise aspects of writing the teachers had in mind in planning the writing experiences.

Prewriting activities and materials, and task instructions should agree or

at least not conflict with the topic and specified form of the teachers' assigned writing tasks. For this study teachers provided written descriptions of the nature of the topic, prewriting activities, materials and task instructions. Permission to observe and tape record instruction was not granted. Therefore, it was difficult to be sure from their written descriptions the reliance teachers placed on their preparation for writing. Was what the teachers prepared intended to support, emphasize, or illustrate instruction? One assumes a purpose or purposes for topic, prewriting activities and materials, and task instructions - that students will develop writing abilities if they have a framework within which they can practise writing. However, at each grade level there were examples of preparations for writing which related directly to the assigned task, and conversely, preparations that either did not relate or were contradictory to the assigned task.

Maintaining consistency in giving instructions for writing may be the most difficult aspect of assigning a task. Topics may be written down and prewriting activities set. But, instructions are given verbally at various points during class time for writing. When students ask questions about the task during this time, teachers may modify instructions to accommodate the questions, in which case the uniformity in instructions that teachers may have intended is not maintained. The teachers in this study wrote in their descriptions of their assigned tasks that frequently their instructions about the writings were broadened in response to questions students asked while they were writing in class.

One implication is clear from this discussion. If teachers design writing tasks for the development of specific writing abilities, they will maximize the connections among the topic prewriting activities, and task instructions in

order to maximize the clarity with which students respond. In instances where topic, prewriting activities, and task instructions conflict, variations in students' responses usually occur that may minimize development of the writing abilities the teachers considered important.

What follows from this point is that by directing students to specific aspects of writing, teachers direct the range of writing abilities the students practise. Assigned writing tasks should assist students to learn and practise an increasing range of modes of writing, of topics, and of forms (Moffett, 1968; Britton, 1975). Structuring a series of writing assignments that includes a continuum of practice in aspects of and purposes and audiences for writing becomes very important. Using the Moffett and Wagner (19) language arts curriculum as an example, discourse experiences arranged with speaker (writer), audience, subject relationships, and levels of abstraction in mind will ensure that during any school year students learn to use and build on writing abilities that have potential, eventually, to develop a command of the universe of discourse.

The findings of this study raise questions as to whether professional educators are aware of the generality of their writing tasks. Most teachers' writing tasks lacked specifications. Do teachers consider their present writing tasks as sufficiently specific? Do teachers consciously set writing tasks to allow freedom in students' written responses? What are the implications of words or phrases used repeatedly in writing instructions?

In this study, the direction to "write a story" was used frequently. What are the connotations of that direction for elementary school students? Does the phrase predispose students to a particular kind of writing? Do they have in their minds, already, a kind of "story frame" based on individual experiences with reading and writing?

The majority of the tasks assigned during this study included the instruction to "write a story." If "story" is taken to mean a shaped piece of writing different from a report, argument, or opinion - the transactional mode of writing - then the instruction to "write a story" is an instruction to write in the poetic mode. And yet, the majority of the students' writings (70%) were categorized in the transactional mode. It is not possible to know with certainty the intentions of the teachers in using the term or the students' understanding of it. The common use of the term by all three teachers, the additional explanations in the descriptions they provided of the writing tasks, and instructions given to students indicated that "story" is used in a loose sense to include writing which does not have the characteristics of the poetic mode as described by Britton (1970) - the conscious shaping of prose or poetry for an audience.

A student's sense of story is developmental (Applebee, 1978). Without talking to students directly, it is not possible to know the "story frame" they already possess and whether they use that frame in its entirety in responding to demands in school to write a story. What is overt in a student's story may be the "tip of the iceberg" as Shuy (1981) describes writing. Teachers, too, have their own personal construct of what "story" includes, a construct that is likely to be more complex than that of their elementary school students. In this study teachers did not describe any attempt to discover their students' concept of "story."

Do teachers' and students' "story frames" match? In what ways? How do students' "story frames" influence their response to the direction to "write a story?" This aspect of writing assignments is an area for further study.

Aspects of Writing Tasks

Another question this study raised was the awareness on the part of

teachers, of the many aspects of writing other than topic. Teachers in this study indicated a lack of awareness of territory and mode, and a lack of consideration of person as an aspect to be noted in writing tasks. Even if teachers were aware of aspects of writing such as territory, person, and mode of what use to them is this awareness in developing students' writing abilities?

Territory. Territory, by itself, has limited usefulness for analyzing students' writings. The present definitions of primary, secondary, and extended territory are applicable to younger students' writings. In the writings of older students, setting and story content may conflict with territory. Territory could be a means of checking for scope in students' writings over time. If writings tend to be mainly in one territory, teachers might consider structuring tasks to encourage writing in a different territory thereby broadening one aspect in the range of students' responses. Related to the need to develop range of responses is the use of territory to encourage expressive writing through structuring topics in primary or secondary territory.

Person. If it is important to assign a point of view in writing, where should that happen in elementary school? Most tasks assigned during this study specified person through the nature of the writing task not through conscious teaching of what point of view is or how a change in point of view can affect writing. Mosenthal, Davidson-Mosenthal, and Krieger (1981) found that fourth grade students can develop points of view in their classroom writing and that student-teacher verbal interaction is one influence on how point of view evolves.

Students' writing experiences are limited if they are not encouraged to take a different point of view, to see an event, tell a story, or explore

emotions through another's eyes. Teachers may teach writing with certain assumptions in mind: students will learn point of view through their reading, making direct instruction unnecessary, or, students will learn point of view at the next grade level. For whatever reasons, teachers in this study rarely focussed attention on person as an integral part of writing. One can speculate that time, oversight, lack of knowledge, or assumptions about if, when, and how point of view ought to be introduced could be factors in decisions about teaching this aspect of written language. Nevertheless, person, like territory, could be instrumental in broadening the range of students' responses.

Mode. The predominance of the use of transactional mode by students in their writings means that students are not drawing on personal resources to any extent in responding to writing tasks (Britton, et al., 1975; Whale & Robinson, 1978; Whale, 1980). The "self" which is evident in personal expressive writing is being ignored in favour of transactional writing which "gets things done," performs some actions - reporting, persuading, arguing - on the readers. Writing in the transactional mode is the "participant" form of language (Britton, 1970; Britton, et al., 1975). Writing in the poetic mode is the "spectator" form of language, a form that involves stepping back from the experience to shape it and present it as a whole. Writing in the expressive mode is the base from which transactional and poetic writing develop. If experience in using expressive mode is overlooked by teachers, the range of students' writing abilities is limited.

Specifying primary or secondary territory could be helpful in encouraging writing in the expressive mode. In order to write about personal ideas and emotions students may need to write about something they know well, something in primary or secondary territory. Specifying first person along with primary

or secondary territory could encourage writing in the expressive mode.

Specifying an audience other than teacher could encourage responses closer to the "self" of the writer. None of the tasks assigned during the time of this study specified audience for the writings. Presumably audience was the teacher since no one else read the writings, made corrections, or wrote comments on them. Writing to a peer or groups of peers or to one's family has potential to broaden the range of modes students use in writing.

Conclusion

The nature and presentation of writing tasks is a complex process in which a network of relationships exists among the resources and materials, the prewriting activities, the instructions for the task, and specific aspects of the tasks as they are presented to students. By increasing the awareness of teachers of the limitations of relying on restricted resources and materials as sources for writing tasks (reading series and commercial kits and books); of the need for specificity and consistency in instructions for the writing tasks; of the need for understanding students' concepts of "story"; of the influences of territory, person, and mode in written responses; and of the problems inherent in providing a narrow range of writing experiences, this study provides teachers with information on which to base an expanded range of writing experiences for their students.

References

- Applebee, Arthur. (1978). The child's concept of story. Chicago: University of Chicago Press.
- Britton, James. (1975). Language and learning. Coral Gables, FL: University of Miami Press.
- Britton, James et al. (1975). The development of writing abilities, 11-18. Schools Council Research Studies. London: MacMillan Education Limited.
- Graves, Donald H. (1973). Children's writing: Research directions and hypotheses based upon an examination of the writing processes of seven year old children. Unpublished Doctoral dissertation, State University of New York, Buffalo, N.Y.
- Moffett, James. (1968). Teaching the universe of discourse. Boston: Houghton Mifflin Co.
- Moffett, James & Wagner, Betty J. (1976). Student-centred language arts and reading, K-13 (2nd Ed.). Boston: Houghton Mifflin Company.
- Mosenthal, P., Davidson-Mosenthal, R., & Krieger, V. (1981, October). How fourth graders develop points of view in classroom writing. Research in the teaching of english. 15(3), 197-214.
- Shay, R.W. (1981). A holistic view of language. Researching the teaching of english. 15(2).
- Whale, K., & Robinson, S. (1978, December). Modes of students' writings: A descriptive study. Research in the teaching of english. 12(4), 349-355.
- Whale, K.B. (1980). The teaching of writing in an elementary school. Unpublished Doctoral dissertation, University of Toronto, Toronto, Ontario.